Westway and Imperium Expansion Projects
Draft Environmental Impact Statements

Vessel Traffic Fact Sheet

The proposed projects would increase the number of large commercial vessels traveling through Grays Harbor to and from the project sites. The vessels would be a mix of tank barges and tankers, the largest of which would be a Panamax size tank ship. The total number of vessels ranges from 45 to 119 vessels for Westway, and 75 to 200 vessels for Imperium. The lower number is if only tankers are used, because tankers can hold more liquid than tank barges. If only the smaller tank barges are used, then the higher number applies. A combination of tankers and barges would likely be used to transport liquids. The studies used the highest number of vessels to analyze impacts on vessel traffic in Grays Harbor. Large commercial vessels use the Grays Harbor Navigation Channel, which provides access to the Port of Grays Harbor. The vessels would be at Terminal 1 at the Port of Grays Harbor.

What vessel traffic impacts were analyzed?

The studies used information from the Port of Grays Harbor, Grays Harbor pilots, other studies, and the Grays Harbor Safety Plan. They analyzed how traffic in the channel is managed, and if there are enough pilots and tug boats. They also looked at the number of vessels that could dock at Terminal 1. The studies looked at fishing vessels in Grays Harbor, and how increased vessel traffic could affect them.

Vessel traffic outside of Grays Harbor, off the coast of Washington and in Puget Sound, is described in Chapter 5, *Extended Rail and Vessel Transport*. Risks of spills and explosions from vessels are analyzed in Chapter 4, *Environmental Health and Safety*.

Vessel – ship or barge

Tank vessel – marine vessel used to transport bulk liquids such as crude oil; it includes **tankers** (self-propelled ships) and **tank barges** (barges propelled by tugs).

Typical Vessel Types and Capacity

Vessel Type	Capacity
Crowley 550-Class tank barge	6.5 million gallons (150,000 barrels)
Crowley 650-Class tank barge	8 million gallons (185,000 barrels)
Crowley 750-Class tank barge	14 million gallons (330,000 barrels)
Panamax tanker	15 million gallons (350,000 barrels)

How were the impacts analyzed?

The studies describe current vessel traffic in Grays Harbor. They consider the proposed facility operations and transportation by vessels. Then they identify potential impacts on vessel traffic from the proposed projects in Grays Harbor and at Terminal 1. Finally, the studies include actions that can mitigate or offset the potential impacts.

The analysis of the vessel traffic in Grays Harbor looked at factors that could affect the movement of ships. This included the number and type of ships and barges. For the navigation channel, the studies analyzed the depth of water, the effect of tides, and vessel drafts (the depth of the vessel under the water line). They also looked at how vessel traffic is managed in Grays Harbor, and the typical areas and activities of commercial and tribal fishing and recreational vessels.

How would the proposed projects affect vessel traffic?

Construction and Operations

There is no in-water work for the proposed projects, so there is no impact on vessel traffic from construction.

Both Westway and Imperium propose to use Terminal 1 for their vessels. Tankers and tank barges currently use this terminal, but the number of vessels would increase under the proposed projects. Under the Westway proposal, Terminal 1 would be occupied up to an additional 119 days per year. Under the Imperium proposal, Terminal 1 would be occupied up to 200 days per year (including both existing and proposed vessels). If both projects are approved, Terminal 1 would be occupied up to 363 days per year. This would exceed the maximum capacity of the dock, considering needed time off for maintenance, but is based on the assumption that the greatest number of vessels would be used for each project.

Vessel Traffic

The Westway project would add up to 238 additional vessel trips (one-way travel) per year. The Imperium project would result in up to 400 vessel trips a year. The studies estimated that there would be 436 large commercial vessel trips in Grays Harbor in 2037 without the projects. The increase in vessels averages to less than one vessel trip a day for Westway, and just over one vessel trip a day for Imperium.

Rail and Vessel Trips per Year

Transport	Without Projects	Proposed Project	
		Westway	Imperium
Rail	1,235	458	730
Vessel	436	238	400

Based on the combined traffic for the proposed projects and future vessels, the studies found there would not be a substantial impact on the navigation channel traffic. The increase in vessels from the proposed projects would not affect the movement of other large commercial vessel traffic in Grays Harbor.

Pilots are responsible for guiding large commercial vessels in Grays Harbor. There are currently three state-licensed pilots working in Grays Harbor. The studies found the increased vessel traffic could be managed with the existing number of pilots, and additional pilots could be available if needed.

There are currently three tug boats available in Grays Harbor to escort large commercial vessels. Tugs help vessels move through the Harbor and assist in case of a problem with engines or steering. There is no federal or state requirement for loaded tank vessels to have tugs in Grays Harbor. Imperium currently uses tugs as part of their Washington state approved plan. The studies include a mitigation measure for two tugs to be used when moving loaded tank vessels to and from the dock. The studies found the existing number of tugs is enough to manage the increase in vessel traffic.

The increase in vessel traffic could affect commercial and tribal fishing activities and recreational boating. The additional vessels would operate in the navigation channel, so impacts outside the channel are not likely. The studies include a mitigation measure to announce vessel arrivals and departures over the marine radio.

Requirements to prevent and respond to spills from vessels are described in Chapter 4, *Environmental Health and Safety*. This chapter also includes required actions to reduce or offset impacts from spills from ships or barges.

What can Westway and Imperium do to reduce impacts on vessel traffic?

The studies identify the following mitigation measures to reduce impacts on vessel traffic:

- Have one tug boat escort loaded tankers or tank barges while moving in Grays Harbor. For a loaded tanker, the tug boat should be attached to the ship.
- Have a second tug boat available to help the vessels while moving to and from the dock.
- Work with the U.S. Coast Guard, Washington Department of Ecology, the Port of Grays Harbor, and Grays Harbor Safety Committee on a formal vessel management system.
- Coordinate with the Port of Grays Harbor and work as a member of the Grays Harbor Safety Committee on procedures for tank vessels in Grays Harbor.
- Work with the Grays Harbor Safety Committee to announce vessel arrivals and departures over a designated Very High Frequency (VHF) marine radio channel.

The detailed list of measures is presented in Section 3.17, *Vessel Traffic*, of the Draft EISs.

Where is more information available?

Within the Draft EISs, Section 3.17, *Vessel Traffic*, has detailed information on current conditions, analysis and findings for vessel traffic in Grays Harbor. The following sections of Chapter 3 also include detailed information and analyses relevant to vessel traffic: Section 3.10, *Recreation*, Section 3.12, *Tribal Resources*, and Chapter 4, *Environmental Health and Safety*. Chapter 5, *Extended Rail and Vessel Transport*, describes vessel traffic outside of Grays Harbor.

There are additional fact sheets discussing *Tribal Resources* and *Recreation*. There is also a fact sheet with information on risks of crude oil spills, *Crude Oil Environmental Health and Safety*.

Visit *www.ecy.wa.gov/GraysHarbor* for more information on the proposed projects.